SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

Southern California Association of Governments

2008 Regional Transportation Plan (RTP) Update

Baseline System Gaps/Deficiencies (Freeways & Arterials)

Los Angeles, California
May 17, 2006

System Metrics Group, Inc.

Today, we update road network system deficiencies

- At the last TAC meeting (3/15/07), we presented an assessment of 2003 Peak Period model freeway results
  - TAC members wanted to see a more comprehensive list of freeway segments including volume and speed data
- Since the last meeting, we received an updated 2003 Base Year AND the 2030 Baseline Models
- We have provided SCAG with a list of SMG defined 2003 & 2030 Freeway and Arterial segments
- Today, we have maps showing where segments have deteriorated between 2003 and 2030 based on the model results
- Today, we summarize those findings and ask for additional feedback on significant issues along major corridors that you identify

Segment Lists

- The updated segment lists include the following information:
  - Segment length for SMG defined segments
  - Lane-Miles (Lanes x Length) for each SMG defined segment
  - Vehicle-Miles Traveled (VMT) = Flow x Lane-Miles
  - Vehicle-Hours Traveled (VHT) = Flow x Length/Speed
  - Average Speed
  - Range of posted speeds along segment
  - Vehicle Hours of Delay at Posted Speed = Flow x Length x (1/Speed – 1/Posted Speed)
  - Delay per Lane-Mile
- The following slides show illustrative page from the freeways and arterials lists

Illustrative Freeway Segment List

County	Route	Dir	Common Name	Cities on Corridor	Postmiles	Length (mi.)	Lane-Miles	Average Lanes	Posted Speeds	AM Peak Period (3-hours)					PM Peak Period (4-hours)				
										Vehicle-Miles Traveled (VMT)	Vehicle-Hours Traveled (VHT)	Average Speed	Delay (@ Posted Speed)	Delay per Lane-Mile	Vehicle-Miles Traveled (VMT)	Vehicle-Hours Traveled (VHT)	Average Speed	Delay (@ Posted Speed)	Delay per Lane-Mile
Los Angeles	405	NB	San Diego Fwy	Los Angeles	29.242 - 38.942	10.17	50.5	5.0	65	252,295	7,039	36	3,158	62.5	488,651	39,372	12	31,855	630.7
Los Angeles	101	NB	Hollywood Fwy	Los Angeles	1.752 - 9.952	9.89	42.6	4.3	55	215,201	7,405	29	3,492	82.1	381,634	33,342	11	26,404	620.5
Los Angeles	014	NB	Antelope Valley Fwy	Santa Clarita	33.227 - R76.827	51.94	134.1	2.6	65 to 70	450,550	8,300	54	1,433	10.7	1,020,125	37,036	28	21,427	159.8
Los Angeles	101	NB	Ventura Fwy	Los Angeles	17.424R - 30.241	13.50	63.4	4.7	65	344,749	10,382	33	5,078	80.1	542,490	25,119	22	16,773	264.7
Los Angeles	057	NB	Orange Fwy	Diamond Bar	R0.700 - R3.700	3.93	16.2	4.1	65	84,446	1,929	44	630	38.9	179,798	19,011	9	16,245	1,004.0
Los Angeles	005	NB	Golden State Fwy	Los Angeles	42.3 - R43.523	1.38	7.1	5.1	65	22,796	471	48	120	17.0	76,669	16,820	5	15,641	2,212.3
Los Angeles	210	WB	Foothill Fwy	Los Angeles	R9.800 - R0.600	24.03	97.9	4.1	65	284,627	5,247	54	869	8.9	751,449	26,801	28	15,240	155.6
Los Angeles	005	NB	Santa Ana Fwy	Commerce/ Downey	10.5 - 9.6	6.71	27.7	4.1	65	166,998	7,246	23	4,677	169.0	250,991	17,838	14	13,977	504.9
Los Angeles	005	NB			42.1 - R88.421	43.19	172.4	4.0	65	449,523	7,931	57	1,016	5.9	851,391	26,452	32	13,354	77.5
Los Angeles	605	NB	San Gabriel River Fwy	Santa Fe Springs	R10.000 - R9.900	7.51	30.6	4.1	65	158,459	4,333	37	1,895	62.0	275,869	15,590	18	11,346	371.3
Los Angeles	005	NB		Los Angeles	R44.323 - R45.723	2.29	10.3	4.5	65	32,112	607	53	113	11.0	102,297	12,560	8	10,986	1,064.5
Los Angeles	101	SB	Hollywood Fwy	Los Angeles	9.852 - 1.752	9.92	42.3	4.3	55 to 65	263,771	15,958	17	11,167	263.8	331,735	16,911	20	10,886	257.1
Los Angeles	005	SB	Santa Ana Fwy	Commerce/ Downey	9.6 - 10.1	6.39	25.6	4.0	65	163,420	7,906	21	5,392	210.9	227,295	13,963	16	10,466	409.5
Los Angeles	010	EB	San Bernardino Fwy	San Dimas/ West Covina	10.707 - 42.8	11.27	49.7	4.4	65	244,557	6,047	40	2,284	46.0	413,256	16,746	25	10,389	209.1
Los Angeles	060	EB	Pomona Fwy	East Los Angeles	10.259 - R8.226	7.94	38.9	4.9	65	173,962	4,124	42	1,448	37.3	319,631	15,218	21	10,301	265.1
Los Angeles	005	NB	Santa Ana Fwy		0.7 - 6.7	6.88	27.7	4.0	65	147,984	4,570	32	2,293	82.8	245,714	13,944	18	10,164	366.9

= Speeds < 35 mph

= Speeds >= 35 mph and < 55mph

Illustrative Arterials Segment List

County	Road Name	City	Length (mi.)	Lane-Miles	Average Lanes	Posted Speeds	AM Peak Period (3-hours)					PM Peak Period (4-hours)				
							Vehicle-Miles Traveled (VMT)	Vehicle-Hours Traveled (VHT)	Average Speed	Delay (@ Posted Speed)	Delay per Lane-Mile	Vehicle-Miles Traveled (VMT)	Vehicle-Hours Traveled (VHT)	Average Speed	Delay (@ Posted Speed)	Delay per Lane-Mile
Orange	Ortega Highway		13.94	27.9	2.0	40 to 55	75,411	5,960	13	4,188	150.2	127,614	10,389	12	7,392	265.1
Orange	E Santiago Canyon Rd		3.64	7.3	2.0	55	24,252	3,532	7	3,092	424.7	35,696	7,673	5	7,024	964.9
Orange	Irvine Center Dr	Irvine	6.75	40.5	6.0	35 to 60	80,464	2,797	29	1,333	32.9	135,870	6,370	21	3,899	96.3
Orange	Carbon Canyon Rd	Brea	1.08	2.2	2.0	45	6,265	1,078	6	938	434.5	10,554	3,173	3	2,939	1,360.6
Orange	Pacific Coast Highway	Seal Beach	3.73	20.6	5.5	40 to 50	44,495	1,652	27	656	31.9	78,774	3,815	21	2,058	100.0
Orange	Macarthur Blvd	Irvine	3.58	23.6	6.6	35 to 55	32,632	1,374	24	659	27.9	61,521	3,348	18	1,998	84.5
Orange	Beach Blvd	Buena Park	3.39	20.3	6.0	35 to 45	41,339	1,777	23	655	32.2	70,765	3,858	18	1,939	95.3
Orange	W Coast Highway	Huntington Beach	1.68	10.1	6.0	45	22,476	878	26	378	37.5	40,508	2,707	15	1,806	179.2
Orange	W Imperial Highway	Brea	2.93	17.6	6.0	35 to 45	35,389	1,439	25	550	31.3	64,495	3,331	19	1,711	97.3
Orange	Alton Pky	Irvine	3.23	19.4	6.0	40 to 55	25,479	974	26	501	25.8	46,735	2,574	18	1,705	88.0
Orange	Adams Ave	Huntington Beach	2.77	16.6	6.0	45	25,371	1,030	25	467	28.1	44,396	2,641	17	1,654	99.5
Orange	S El Camino Real	San Clemente	1.85	7.4	4.0	30 to 35	20,578	1,878	11	1,254	169.5	26,976	2,470	11	1,651	223.1
Orange	S Coast Highway	Laguna Beach	5.17	20.7	4.0	30 to 50	43,300	1,758	25	694	33.5	66,440	3,184	21	1,554	75.2
Orange	Westminster Blvd	Seal Beach	2.45	9.8	4.0	45	34,453	1,124	31	358	36.5	64,944	2,933	22	1,490	152.0

= Speeds < 15 mph

= Speeds >= 15 mph and < 25mph

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FREEWAY ANALYSIS

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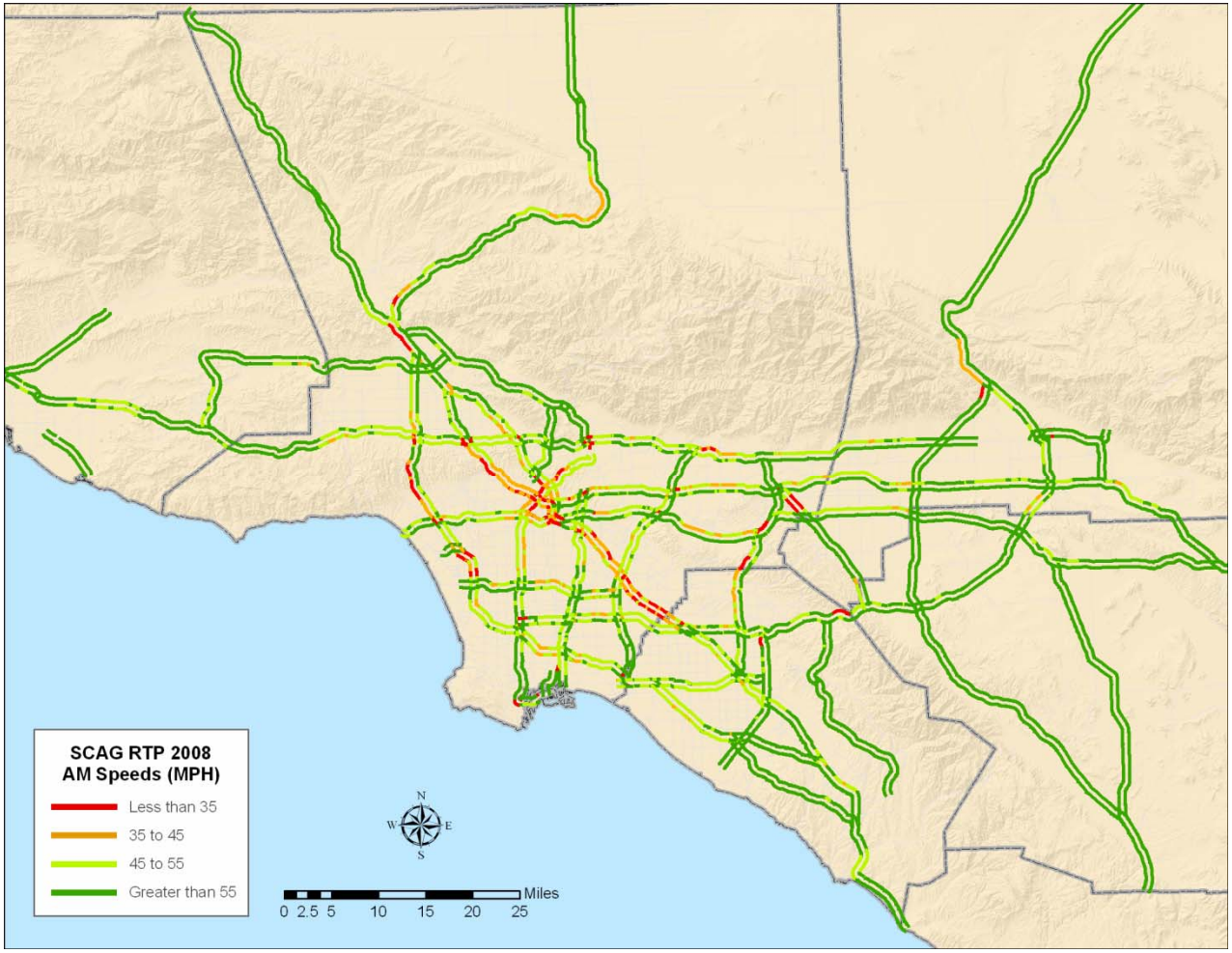
AM Peak Period

FREEWAYS
2003 Base Year AM Peak Period Speeds



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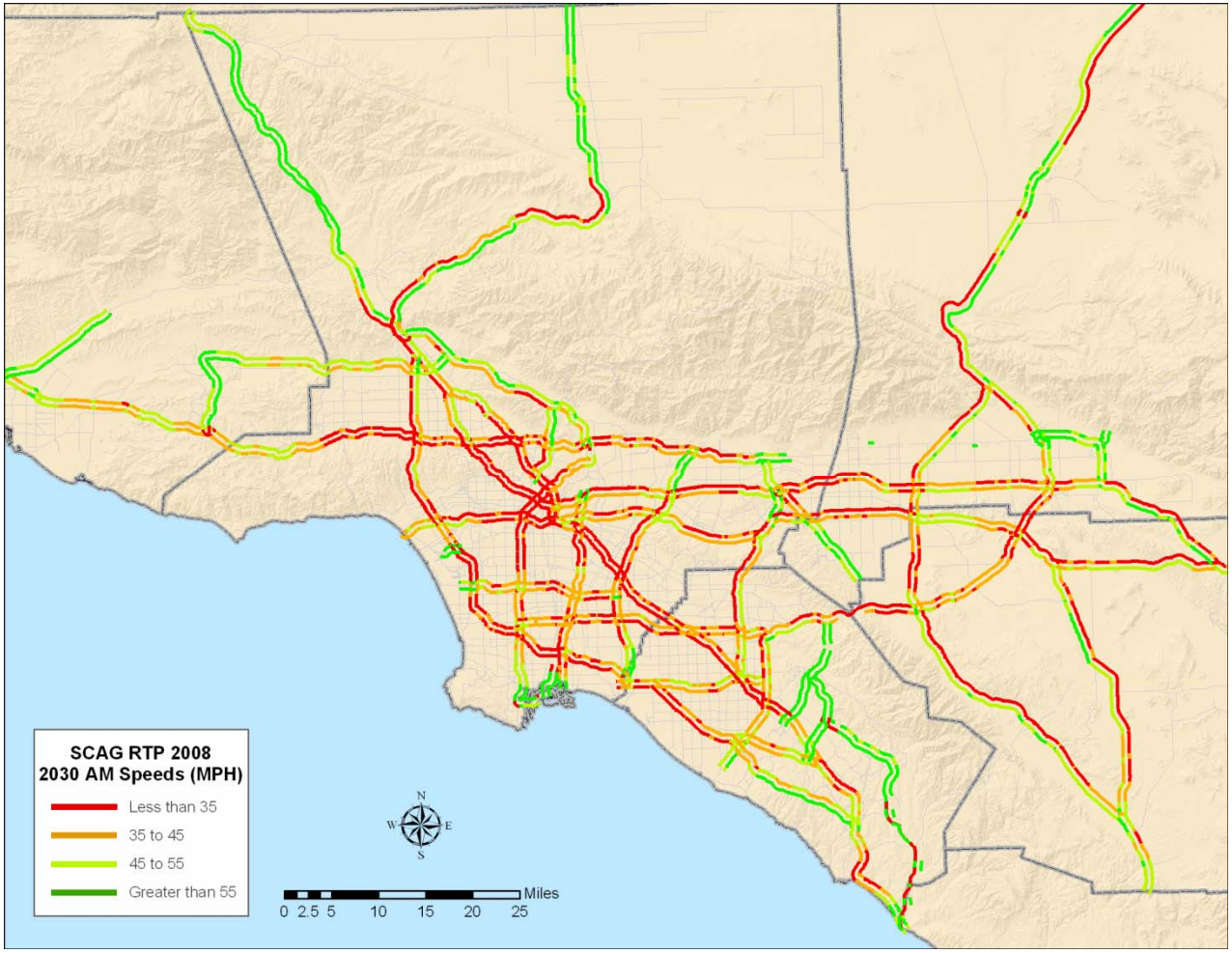
FREEWAYS
2030 Baseline AM Peak Period Speeds



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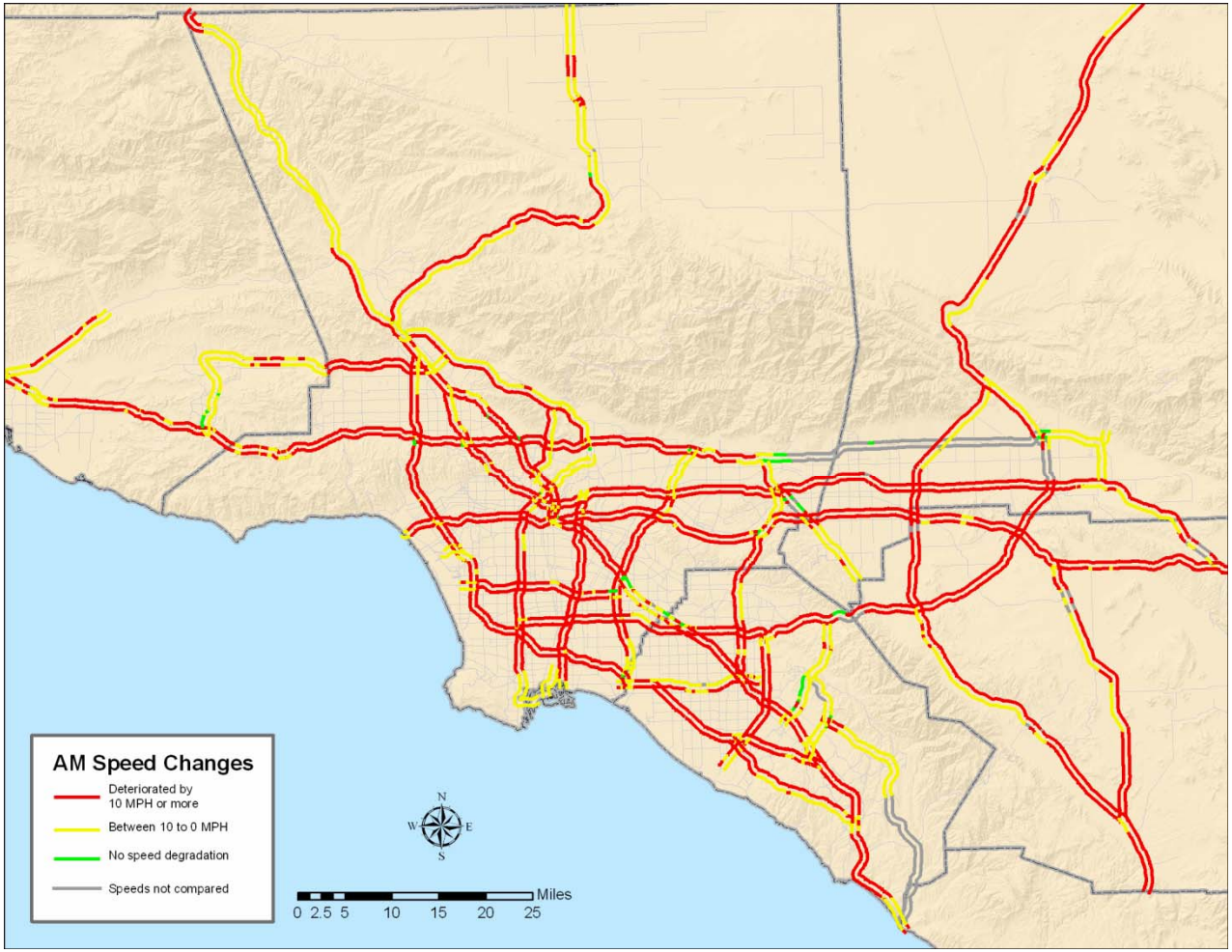
FREEWAYS
Differences - AM Peak Period Speeds



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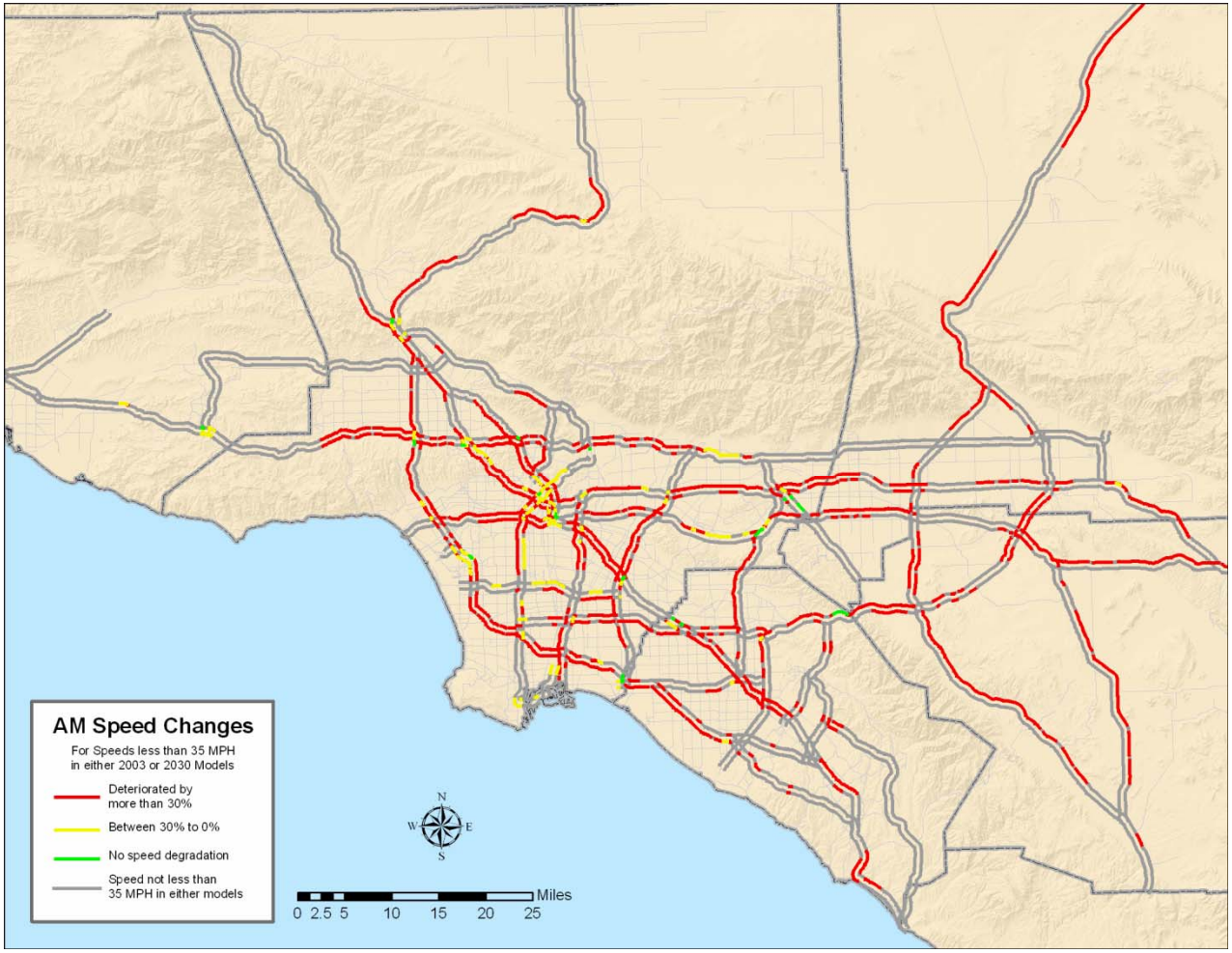
FREEWAYS
Differences – SEVERE AM Peak Period Speeds



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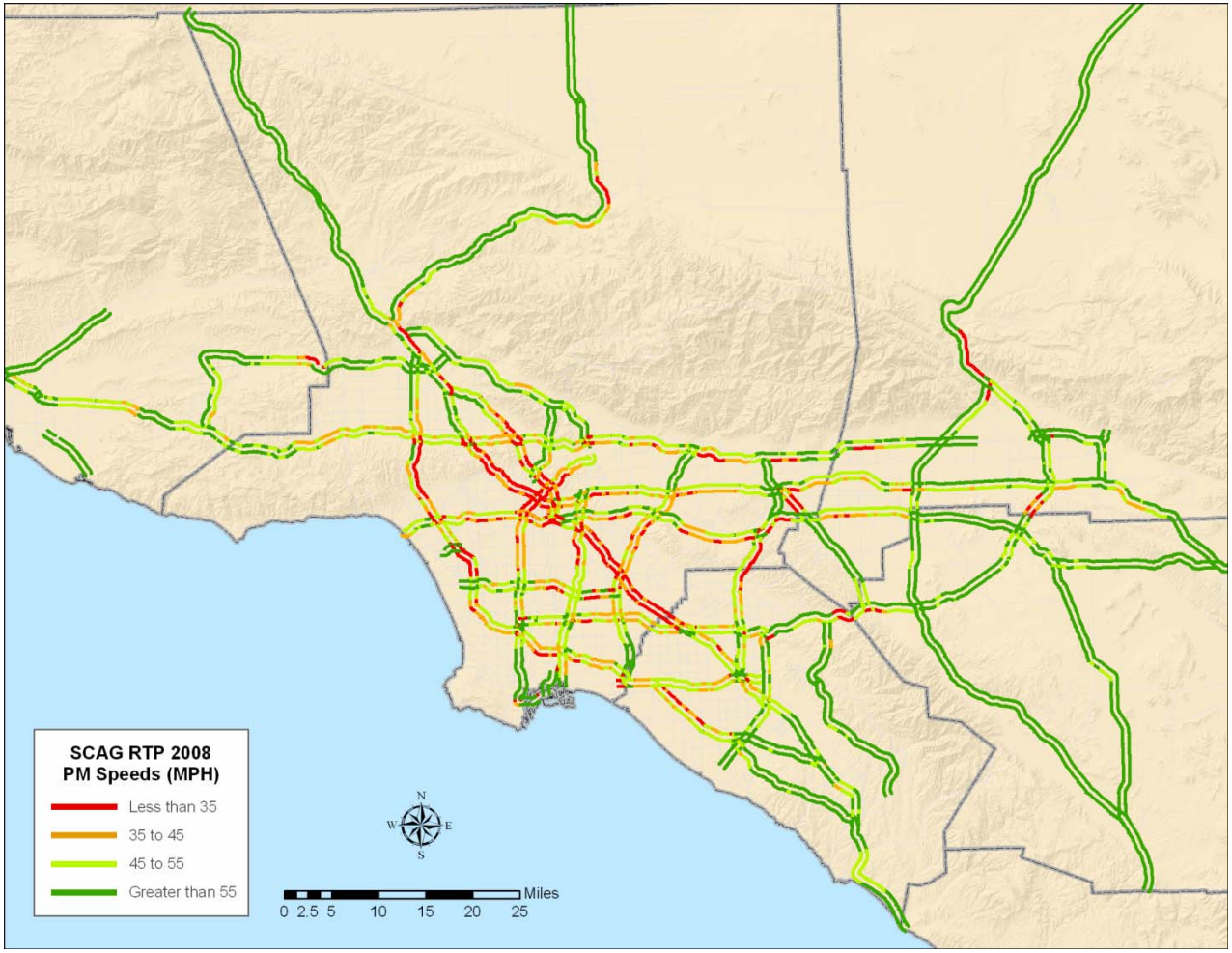
PM Peak Period

FREEWAYS
2003 Base Year PM Peak Period Speeds



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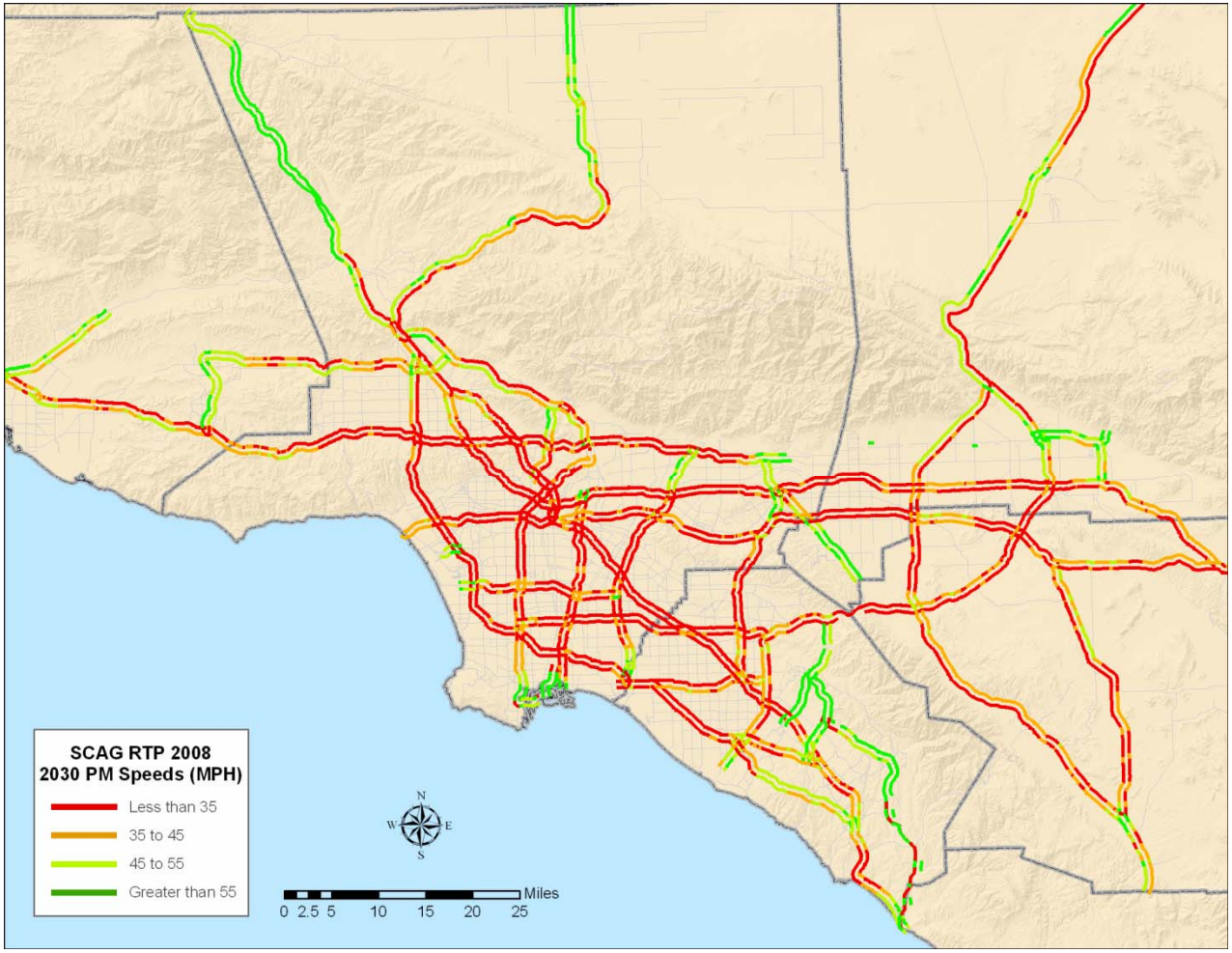
FREEWAYS
2030 Baseline PM Peak Period Speeds



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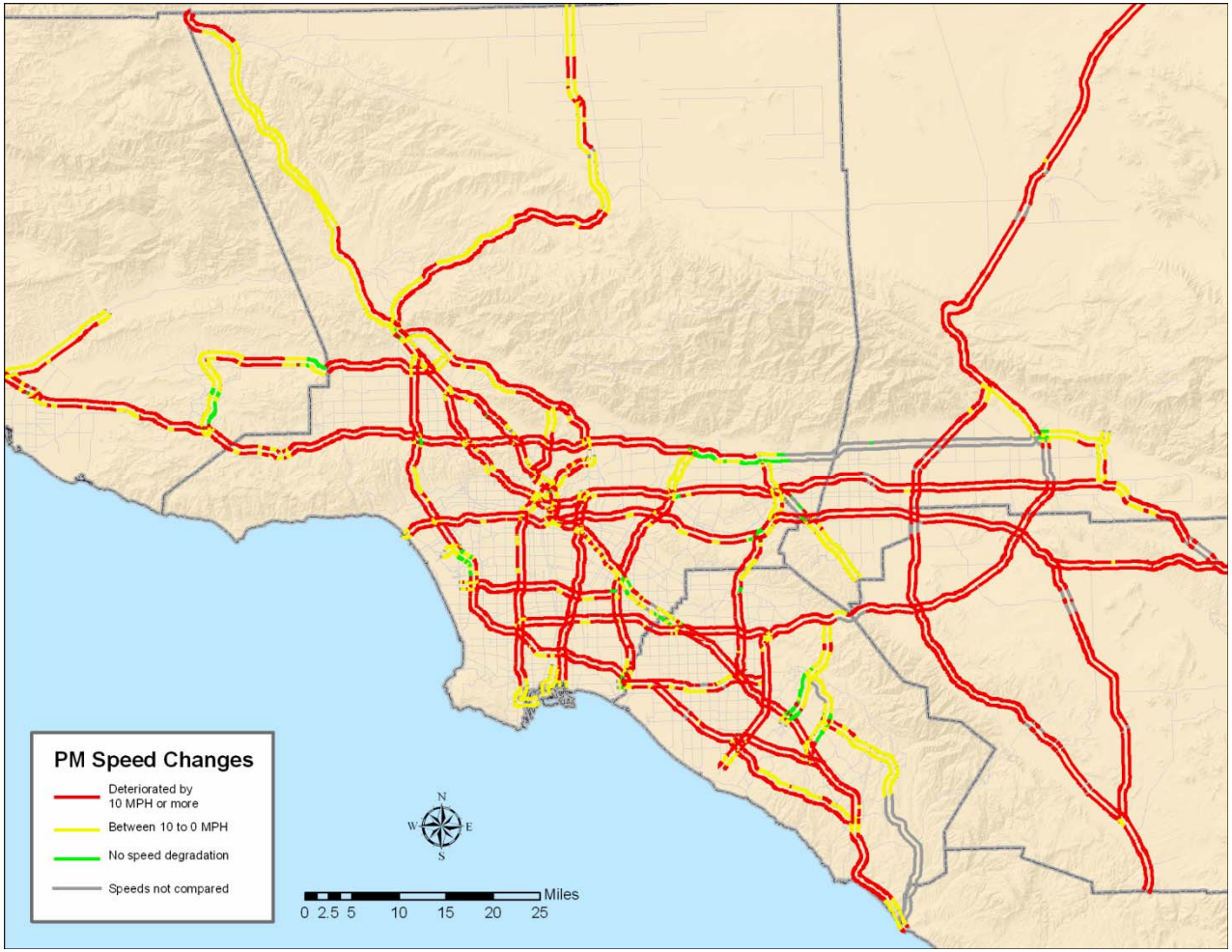
FREEWAYS
Differences - PM Peak Period Speeds



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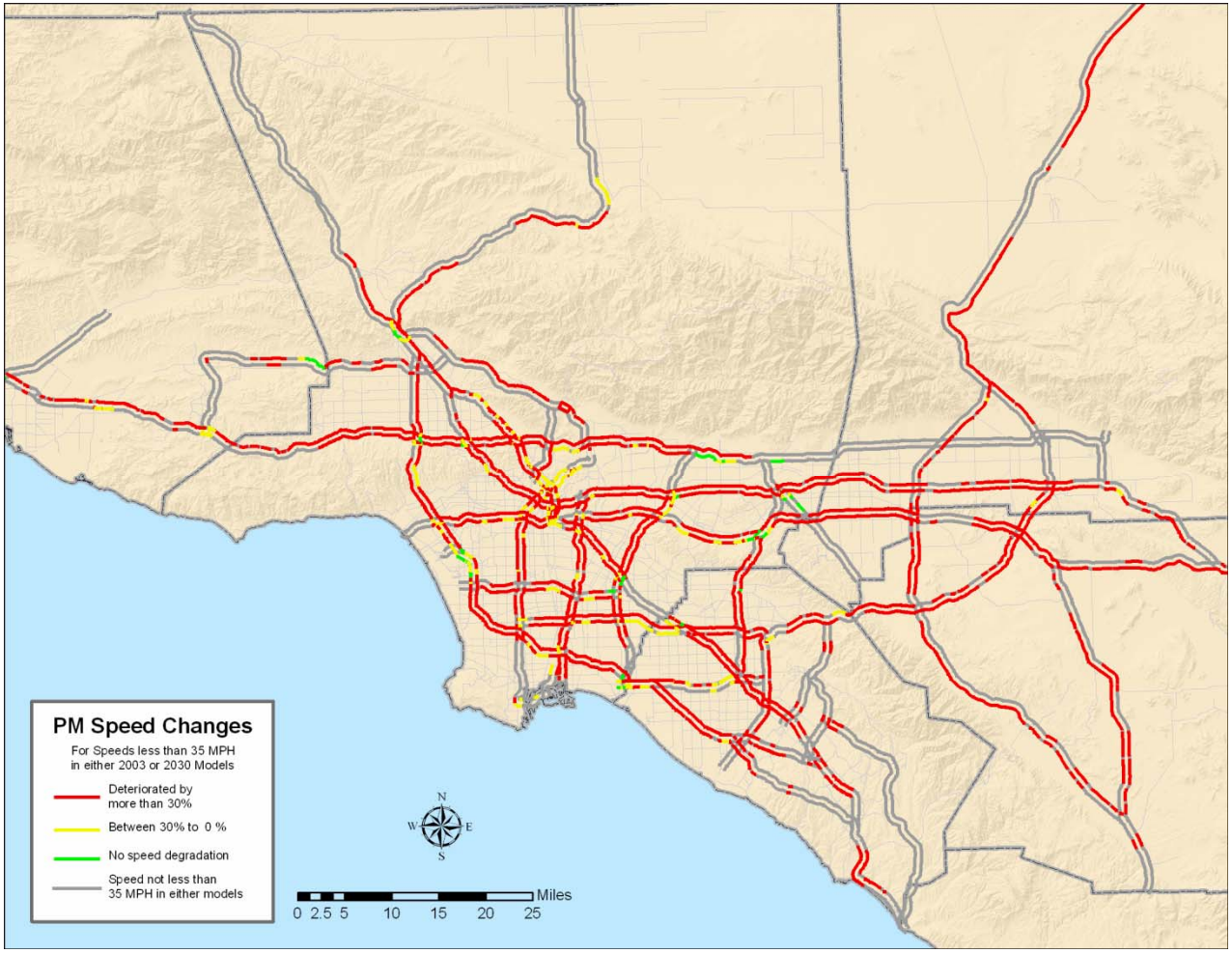
FREEWAYS
Differences – SEVERE PM Peak Period Speeds



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ARTERIAL ANALYSIS

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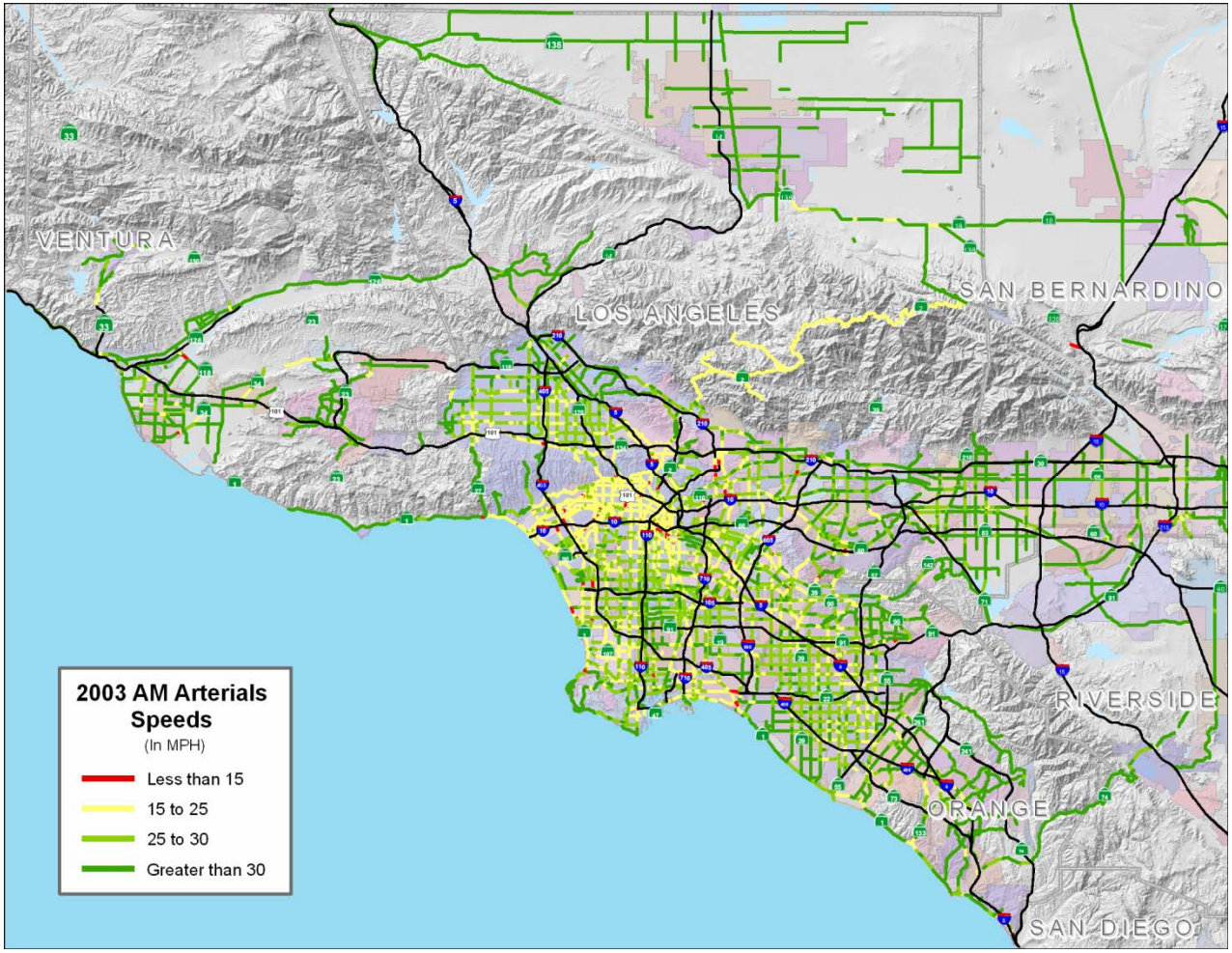
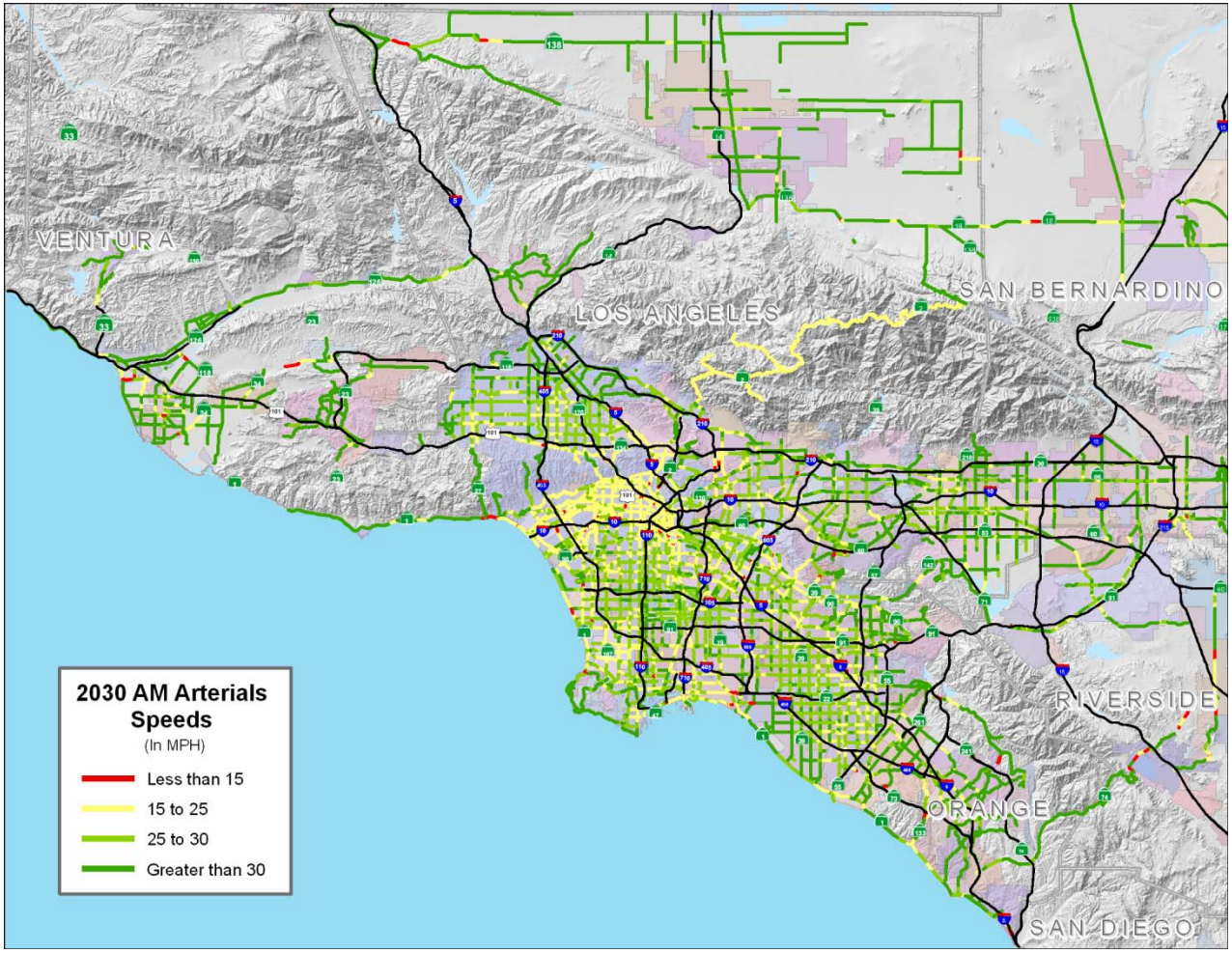
AM Peak Period

ARTERIALS
2003 Base Year AM Peak Period Speeds



ARTERIALS
2030 Baseline AM Peak Period Speeds



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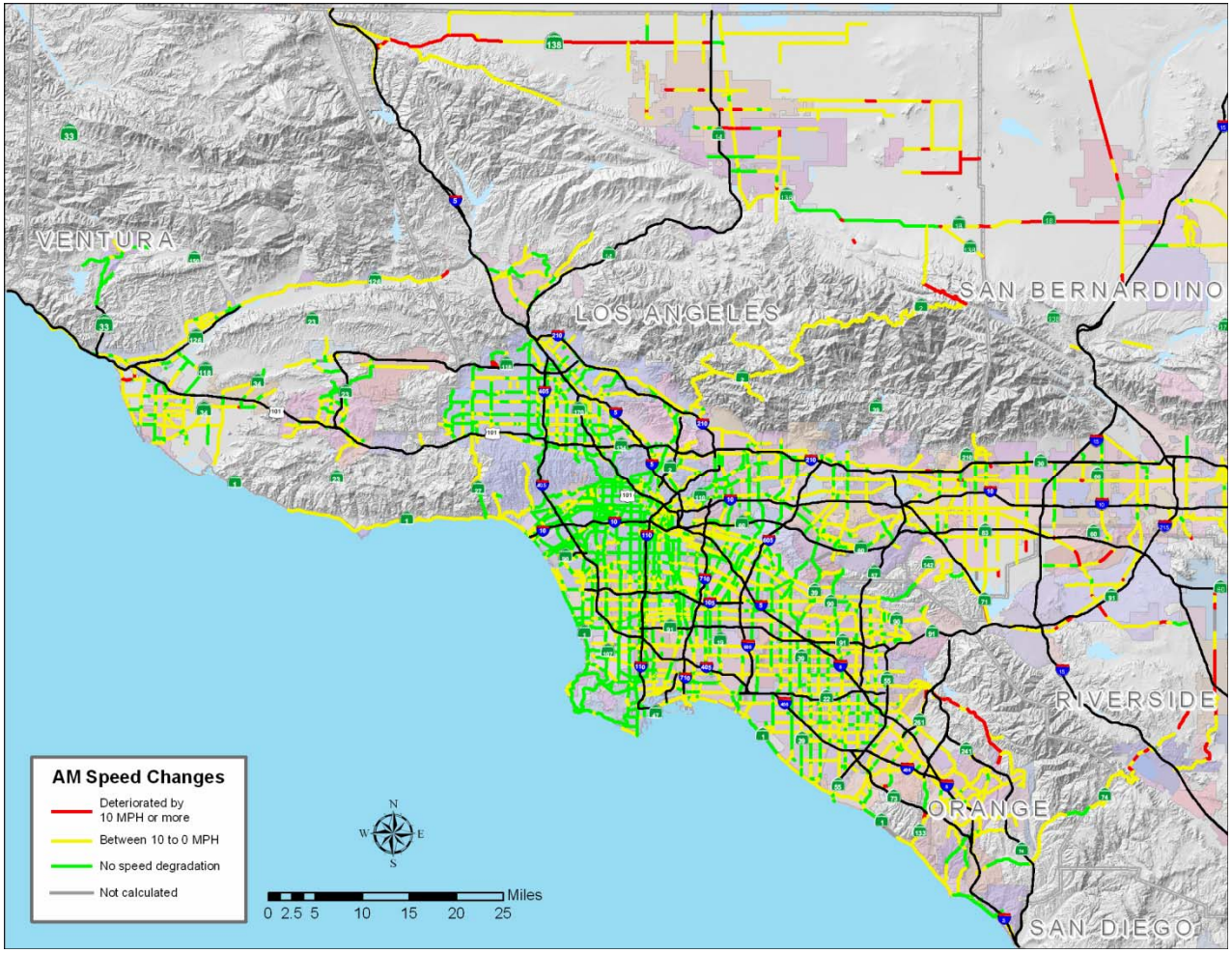
ARTERIALS
Differences - AM Peak Period Speeds



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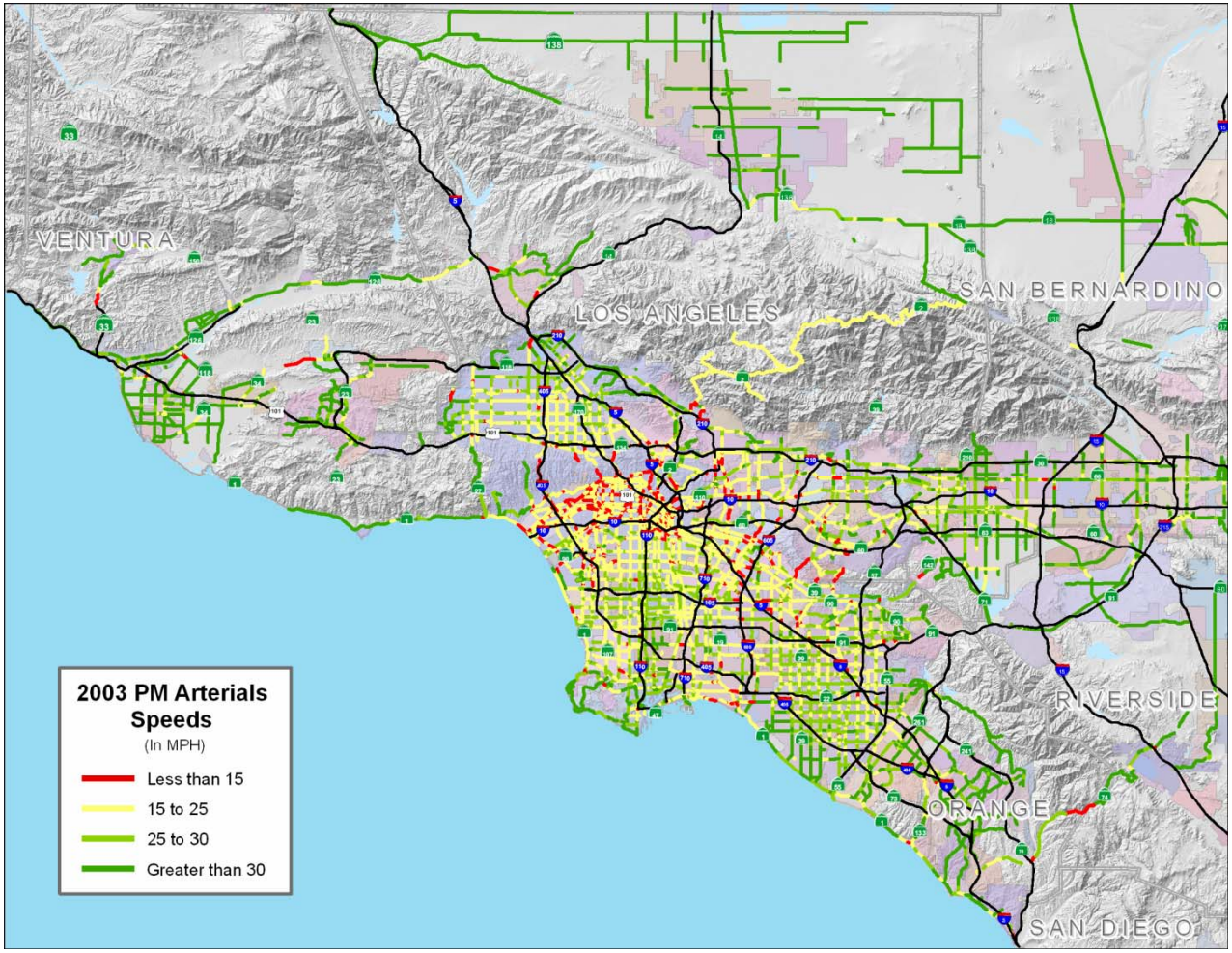
PM Peak Period

ARTERIALS
2003 Base Year PM Peak Period Speeds



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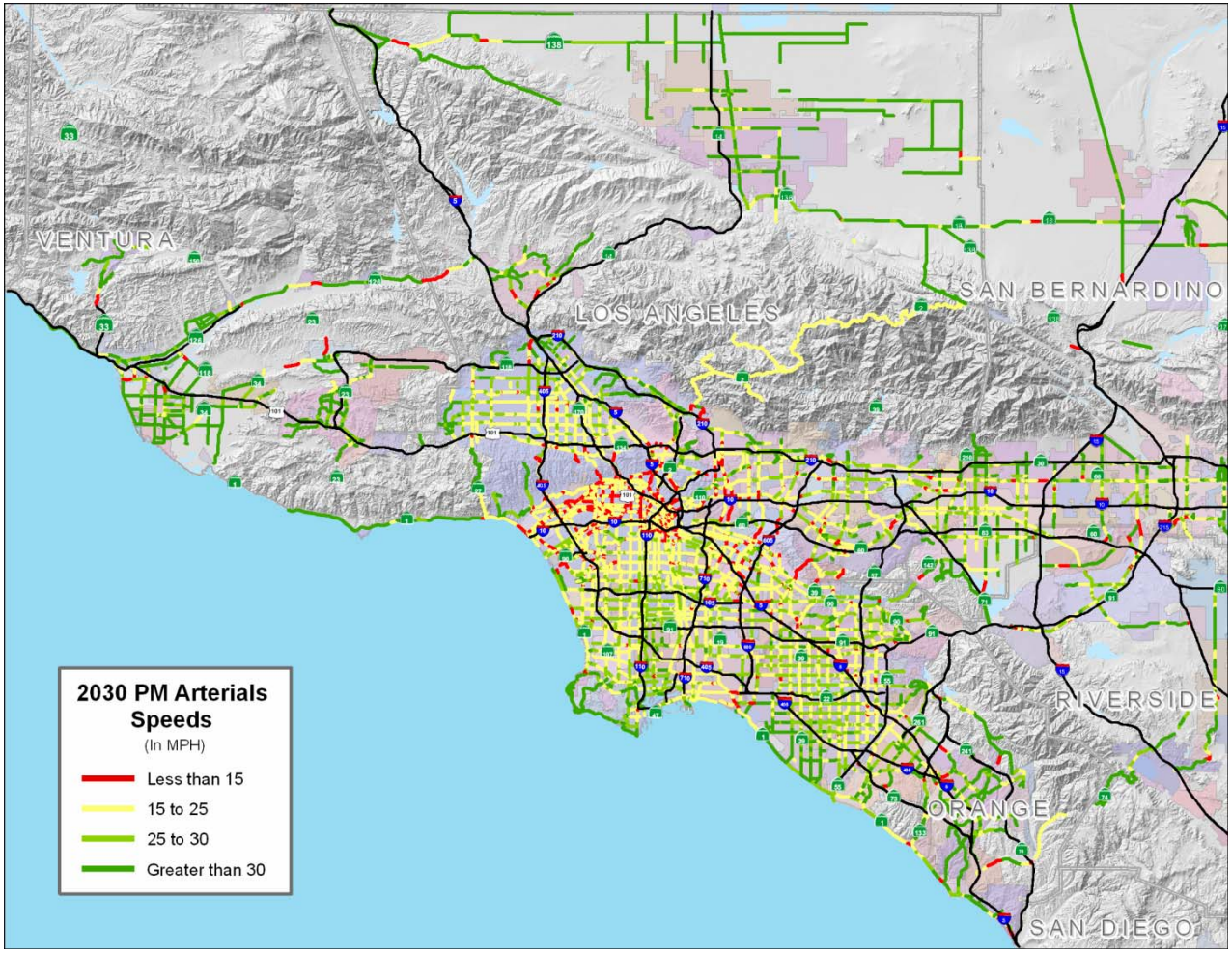
2030 Baseline PM Peak Period Speeds



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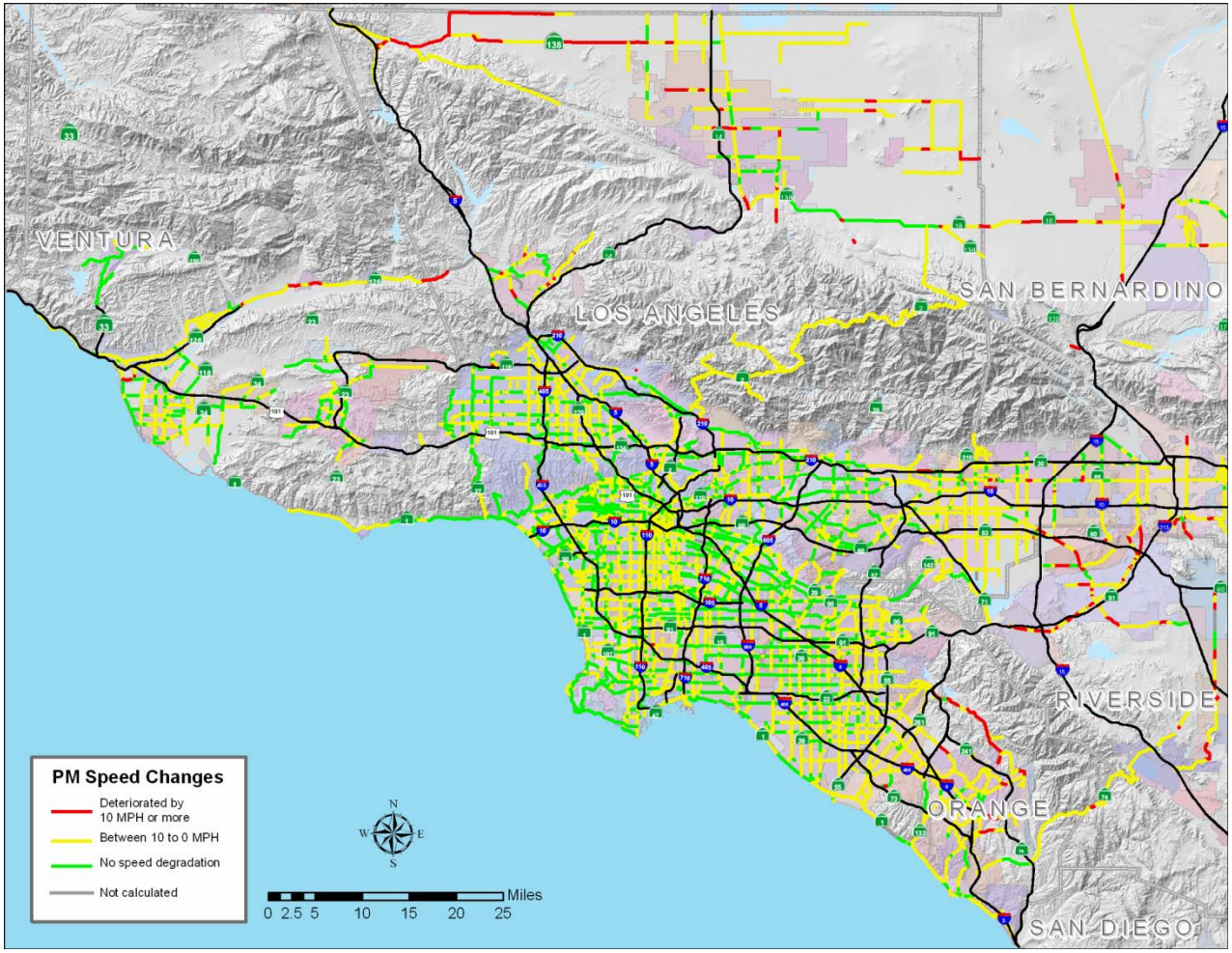
Differences - PM Peak Period Speeds



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Next Steps

- We need to incorporate your feedback on these latest model results
  - We are interested in major corridors of concern
- We are going to incorporate the Baseline projects into this analysis to see how projects may have helped to mitigate issues and where other gaps may occur